

BOTANY.—*New plants mainly from western South America*—V.¹
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The present paper contains descriptions of three new species, one from the upper Amazon basin, collected by the National Geographic Society's expedition to the headwaters of the Orinoco River, and two from the historic Mutis Herbarium² at the Jardín Botánico, Madrid, which has recently become available for study. In addition, four new combinations of names are made, and a new name is substituted for an invalid one.

Piratinera mollis Killip, sp. nov.

Arbor, ramis demum glabris; folia oblonga, apice acuminata, supra subscaberula, in costa sparse puberula, subtus dense et molliter pilosula, pilis divaricatis, nervis lateralibus 8–10-jugis; pedunculi axillares, puberuli; receptaculum depresso-hemisphaericum, bracteis orbiculatis vel subreniformibus, peltatis, ciliolatis; flores ♀ 2, stigmata 2.

Tree; young branches very slender, brown, sparingly or densely pilosulous, the older glabrous; petioles 1 to 2 mm long, densely pilosulous; leaves oblong, 3 to 7 cm long, 1.5 to 3 cm wide, sharply and subabruptly acuminate at apex, rounded-cuneate and unequal at base, coriaceous or subcoriaceous, above dark green and lustrous, slightly scaberulous, sparingly puberulous on midnerve, beneath pale, densely and softly pilosulous throughout, with spreading, curved or straight hairs, the principal lateral nerves 8 to 10 pairs, united near margin, prominulous above, slightly elevated beneath; peduncles axillary, solitary, 2 to 3 mm long, erect or recurved, puberulent; receptacle depressed-hemispheric, 4 to 5 mm in diameter, covered throughout with orbicular or subreniform, peltate, ciliolate, glabrescent or sparingly puberulent bracts 0.5 to 1 mm in diameter; staminate flowers not seen; pistillate flowers 2, the stigmas 2, about 1.2 mm long, elevated above the scales.

Type in the U. S. National Herbarium, no. 1,563,014, collected in Colombia, between 1760 and 1808, by José Celestino Mutis (no. 365). Duplicate at Madrid. This species is also represented by *Mutis* 362 (U. S. N. H. and Madrid).

In Blake's key to the species of this genus³ the proposed new species would come nearest *P. acutifolia* because of the spreading hairs on the under surface of the leaves and the long sharp leaf tips. It differs from that plant in having much smaller leaves with fewer lateral nerves, a much smaller receptacle, and larger bracts.

Inga caudata Killip, sp. nov.

Ramuli et folia juvenilia rufo-hirtella, demum glabra; petiolus et rachis anguste alata, glandulis sessilibus; foliola 3-juga, oblanceolata, caudato-acuminata, subauriculata, membranacea; flores brevispicati; calyx anguste

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² See Killip: *A scientific resurrection: the Mutis Herbarium at Madrid*. Bull. Pan Am. Union, March 1933, pp. 162–171.

³ This JOURNAL 12: 395. 1922.